UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,583	12/31/2003	Hong Jiang	ITL.1704US (P17510)	8582

21906   7590   05/27/2009
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EXAMINER
WAI, ERIC CHARLES

ART UNIT	PAPER NUMBER
2195	

MAIL DATE	DELIVERY MODE
05/27/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	**Applicant(s)**
Advisory Action ***Before the Filing of an Appeal Brief***	*10/750,583*	JIANG ET AL.
	Examiner	**Art Unit**
	ERIC C. WAI	2195

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED <u>12 May 2009</u> FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

   a) ☐ The period for reply expires _____months from the mailing date of the final rejection.

   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

       Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

<u>NOTICE OF APPEAL</u>

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

<u>AMENDMENTS</u>

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will <u>not</u> be entered because

   (a)☐ They raise new issues that would require further consideration and/or search (see NOTE below);

   (b)☐ They raise the issue of new matter (see NOTE below);

   (c)☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d)☐ They present additional claims without canceling a corresponding number of finally rejected claims.

       NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: <u>*None*</u>.

   Claim(s) objected to: _____.

   Claim(s) rejected: <u>*1,3,7,11-21*</u>.

   Claim(s) withdrawn from consideration: _____.

<u>AFFIDAVIT OR OTHER EVIDENCE</u>

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will <u>not</u> be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will <u>not</u> be entered because the affidavit or other evidence failed to overcome <u>all</u> rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

<u>REQUEST FOR RECONSIDERATION/OTHER</u>

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: <u>See Continuation Sheet.</u>

12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____

13. ☐ Other: _____.

/VAN H NGUYEN/
Primary Examiner, Art Unit 2194

Continuation of 11. does NOT place the application in condition for allowance because:
Applicant argues:
   "With respect to claim 1, one issue is whether the reference teaches "granting the resource to the thread of instructions." This must be done "when the resource becomes available." Thus, the observation that there is no point of time specified in the claim (see office action, page 9, paragraph 31) seems to be unsupportable. The resource must be granted when the resource becomes available. The argument that "... the claim requires a granting to be performed at some point in time" (office action at page 9, paragraph 31) recognizes that the granting is not done, at least at the time when the resource becomes available."
   Examiner disagrees. Claim 1 is broad with respect to the claim limitations and the language used. For example, the term 'resource' can refer to system variables, CPU utilization, etc. With regards to the Wang reference, Wang teaches the step of sending all threads that are not the 'first thread' into a waiting state during an SVIR operation (col 6 lines 61-63). As argued previously, this is precisely the same as placing an executable thread of instructions in an inactive state in response to a resource unavailable, where the resource is a static variable. Wang also indicates that the threads are placed in a sleep state when the CPU is locked (i.e. CPU resources are unavailable). When the CPU resource becomes available (i.e. unlocked), the threads are released from the wait state and are allowed to utilized the CPU (col 6 lines 61-65). Therefore, Wang reads upon the invention from multiple interpretations in addition to what was cited in the previous Office Action.

Applicant argues:
   "Instead, the opposite is what happens in the cited reference. Once it is unlocked, the fact that the thread is unlocked is broadcast to all threads. See Figure 5, block 508 and column 8, lines 33-48. There is no granting any thread access to the variable after it has been unlocked. Clearly, all that happens is the availability of the thread is broadcast and then the threads must again request access to the resource. This is different than granting the resource to the thread when the resource becomes available."
   Examiner disagrees. Wang teaches that the threads are 'released'. It is clear that the thread first must not be permitted to access the variable. Then after the unlock semaphore event, the broadcast causes all waiting threads to be released. This release is precisely a granting step.

Applicant argues:
   "The issue of allowing one or more or all of the threads access (paragraph 31 of the office action) misses the point. There is no granting of any access in Duval. Instead, there is merely a broadcast of availability. A thread must still request the resource and if it does not get it, wait in line. There is no automatic or granting when the resource becomes available."
   Examiner disagrees. As argued above and in the previous Office Action, Wang teaches the granting of the resource by allowing waiting resources to access the variable. Also, interpreted another way, Wang allows or grants the waiting threads the utilization of CPU resource by waking the threads from the wait state.

Applicant argues:
   "Similarly, claim 15 calls for automatically changing the thread to the active state and granting the resource to the thread of instructions. Again, we have the automatic granting of the resource, not simply the broadcasting of resource availability, to use the Examiner's language. Therefore, the cited reference fails to meet the claimed limitations."
   Examiner disagrees. As argued above, Wang teaches that the threads are 'released'. It is clear that the thread first must not be permitted to access the variable. Then after the unlock semaphore event, the broadcast causes all waiting threads to be released. This release is precisely a granting step.

Applicant argues:
   "The argument that the threads are allowed to continue execution (i.e. allowed to access the variables) is not the same as what is in the claim. All the threads can now attempt to access the variables. There is no automatic granting of any thread when the variable becomes available. The suggestion that, because the threads are prevented from using the resource, the granting step occurs in order for the threads to access the resource, would mean that since all the threads receive the broadcasts of the availability, then they all have been granted access to it -- an impossibility."
   Examiner disagrees. The threads in Wang are not simply allowed to "attempt" to access the variable; they are allowed to access the variables. Furthermore, there is nothing in Wang that prohibits from allowing all threads to access (i.e. read) the variables that were initialized by the first thread during the SVIR operation. .

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